

# **JBL PERFORMANCE™ SERIES**

## **INSTALLATION INSTRUCTIONS**

**P81BB  
P941BB**

BACK BOXES FOR P81  
AND P941 LOUDSPEAKERS

**JBL**

®

**P81BB/P941BB  
BACK BOXES FOR P81 AND P941  
LOUDSPEAKERS**

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**DOCUMENTATION  
CONVENTIONS**

This document contains general installation instructions for the JBL® Performance™ Series P81BB and P941BB Back Boxes. It is important to read this document before attempting to use this product. Pay particular attention to safety instructions.

**WARNING**

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.

**CAUTION**

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage to, or destruction of, part or all of the product.

**NOTE**

Calls attention to information that is essential to highlight.



## **IMPORTANT SAFETY INSTRUCTIONS**

Read before starting installation:

- Product contains fiberglass wool.
- Disturbing the insulation in this product during installation, maintenance, or repair will expose you to fiberglass wool. Breathing this may cause lung cancer. Fiberglass wool is known to the state of California to cause cancer.
- Fiberglass wool may also cause respiratory, skin and eye irritation.
- To reduce exposure to this substance or for further information, consult material safety data sheets available from the address shown below, or contact your supervisor.

JBL Consumer Products  
250 Crossways Park Drive  
Woodbury, New York 11797 USA

### **WARNING**

This enclosure is not listed for use in air-handling plenums. Installation of this enclosure in walls or ceilings of fire-barrier-rated construction requires that construction methods shall be employed in order to comply with local building or life safety codes. Consult your local authority having jurisdiction (building, electrical or fire safety inspector) to determine what acceptable construction methods will be required.

### **WARNING**

The P81BB In-Wall Back Box weighs 19 lb (8.6kg) empty, and 32 lb (14.52kg) with a P81 speaker system installed in it. The P941BB In-Wall Back Box weighs 19 lb (8.6kg) empty, and 36 lb (16.3kg) with a P941 speaker system installed in it.

ANSI/EIA 636 Recommended Loudspeaker Safety Practices, Section 16.3, recommends that the mounting system used to install the In-Wall Back Box in walls or ceil-

ings should support the weight of the product plus at least four times the weight of the product being installed. That means, for a P941 installed in an In-Wall Back Box, the mounting system should be able to support at least 163 lb (74kg).

It is strongly recommended that the installer consult a construction professional or a professional engineer to determine the appropriate mounting methods to be used for each specific installation location.

## ABOUT THE BACK BOX

Thank you for purchasing the JBL Performance P81BB/P941BB Back Boxes, which are optional rear enclosures for the JBL P81 and P941 In-Wall Loudspeakers. The P81BB/P941BB Back Boxes which provide optimal volume for woofer alignment and reduce acoustic bleed-through to rooms adjacent to your listening area. The P81BB/P941BB Back Boxes also function as mounting brackets designed to facilitate the installation of the P81/P941 in-wall loudspeakers in new construction or major retro-fit installations. The back boxes improve sonic performance while providing solid support for the speaker mounting frame and baffle assembly. Since the back box is installed before the drywall is mounted, it allows the speakers to be mounted in a clean, efficient manner.

The JBL P81BB/P941BB Back Box measures 17-1/2 inches x 28-5/8 inches (445mm x 727mm) (including the flanges). The back box is designed to mount between two 2x4-inch (or 2x6-inch) wall studs on 16-inch centers. See Figures 1 and 2 for inner dimensions of the P81BB and P941BB.

## INSTALLATION INSTRUCTIONS

The following items are required for installation:

- tape measure
- carpenter's level
- pencil
- hammer
- nails
- drywall section
- drywall screws
- staples/U nails
- utility knife
- service wire (included)
- work gloves
- face mask

### CAUTION

The back box should be installed by a professional. Installers must adhere to local building codes to ensure proper installation. JBL is not responsible for any injury or damage caused by improper installation.

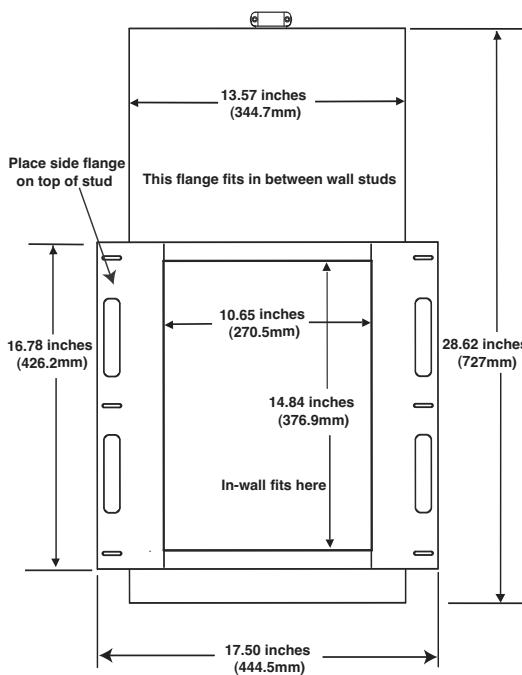


Figure 1: P81BB Back Box Height and Width

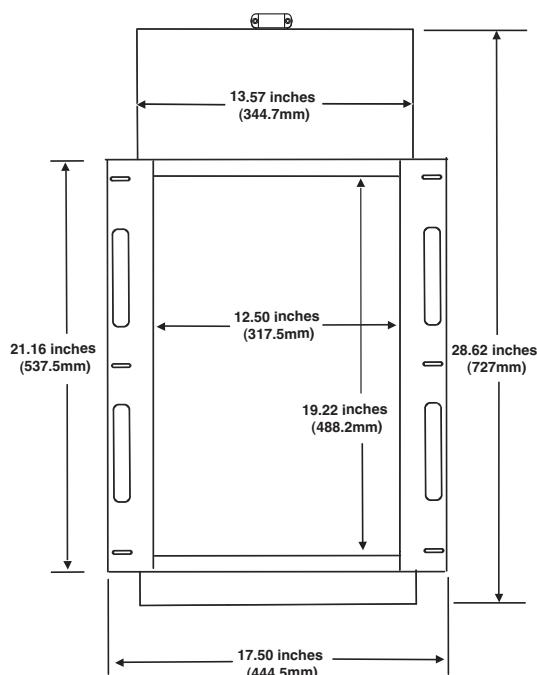
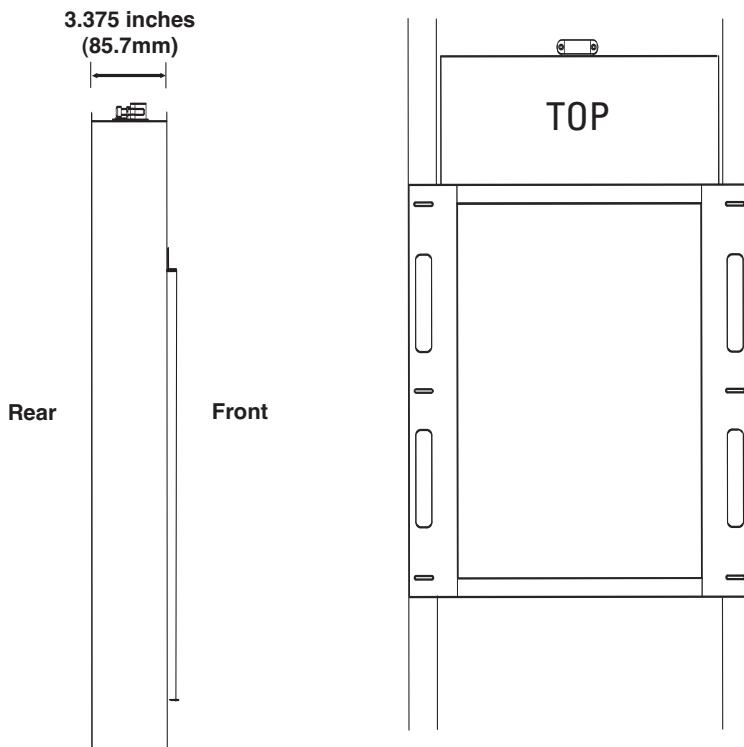


Figure 2: P941BB Back Box Height and Width

## TO INSTALL THE BACK BOX



**Figure 3: P81BB/P941BB Back Box Depth**

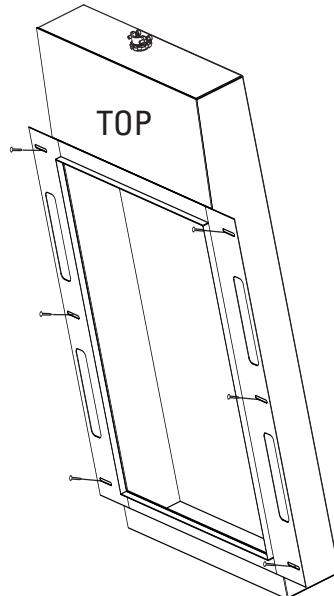
**Figure 4: Place the Back Box Between Wall Studs**

1. Use a tape measure to determine the location where the speaker is to be mounted. Refer to the JBL P81/P941 In-Wall Loudspeaker owner's manual for speaker placement considerations. Record exact measurements from the floor, ceiling and an adjacent drywall section.

### NOTE

The P81BB/P941BB Back Box eliminates sensitivity to placement considerations due to standing waves within the wall cavity, as described in the JBL P81/P941 In-Wall Loudspeaker owner's manual.

2. Position the back box between two wall studs and into the wall cavity, as shown in Figure 4. The back box must be placed between standard 16-inch on-center stud spacing. If desired, the back box can be mounted upside down (large flange toward the floor) if you will be mounting the speaker close to the ceiling.



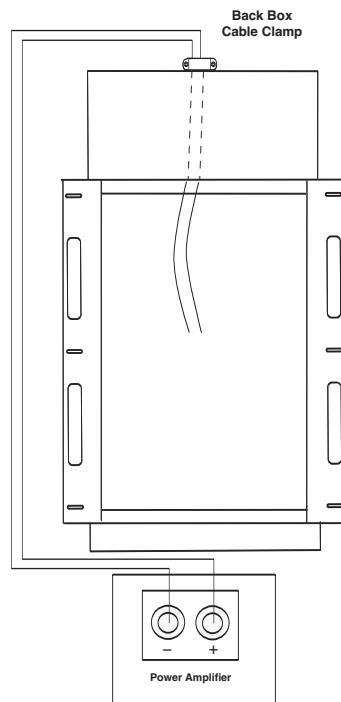
**Figure 5: Fasten Back Box to Wall Studs**

3. Firmly secure the back box into place using nails, as shown in Figure 5.

**CAUTION**

Installers must adhere to local building codes to ensure proper installation. JBL is not responsible for any possible damage caused by improper installation.

4. Feed the power amplifier wires from the wall cavity down through the cable clamp located on top of the enclosure. Pull approximately two feet of wire through the clamp to create a generous service loop inside the enclosure for ease of hookup, as shown in Figure 6.



**Figure 6: Amplifier Connections**

5. Tighten the clamp screws, cinching the wires in place.

**CAUTION**

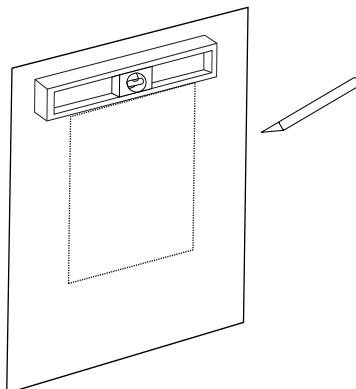
Be sure to comply with local wiring codes. JBL is not responsible for any damage or injuries that may result from faulty wiring.

6. Place the section of drywall over the back box. With tape measure and pencil, carefully measure and mark where to position the wall template (included with the loudspeaker) by using the measurements recorded in Step 1.

7. Use the wall template to trace where to cut the drywall.

8. Cut a small hole in the center of the template area to make sure the template is in the right location.

9. After confirming the correct location, cut the template hole opening, as shown in Figure 7. Use a carpenter's level to ensure the opening is level.

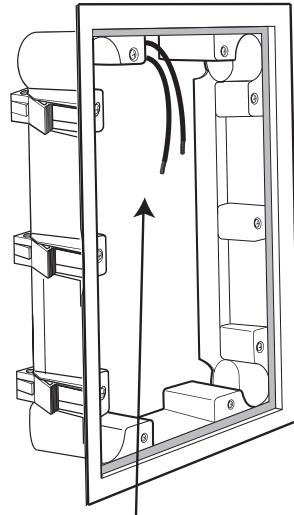


**Figure 7: Cut Opening in Drywall**

10. Fasten the drywall to the wall studs using drywall screws.

11. Install the speaker mounting frame into the wall opening. Refer to the JBL P81/P941 In-Wall Loudspeaker owner's manual for complete instructions.

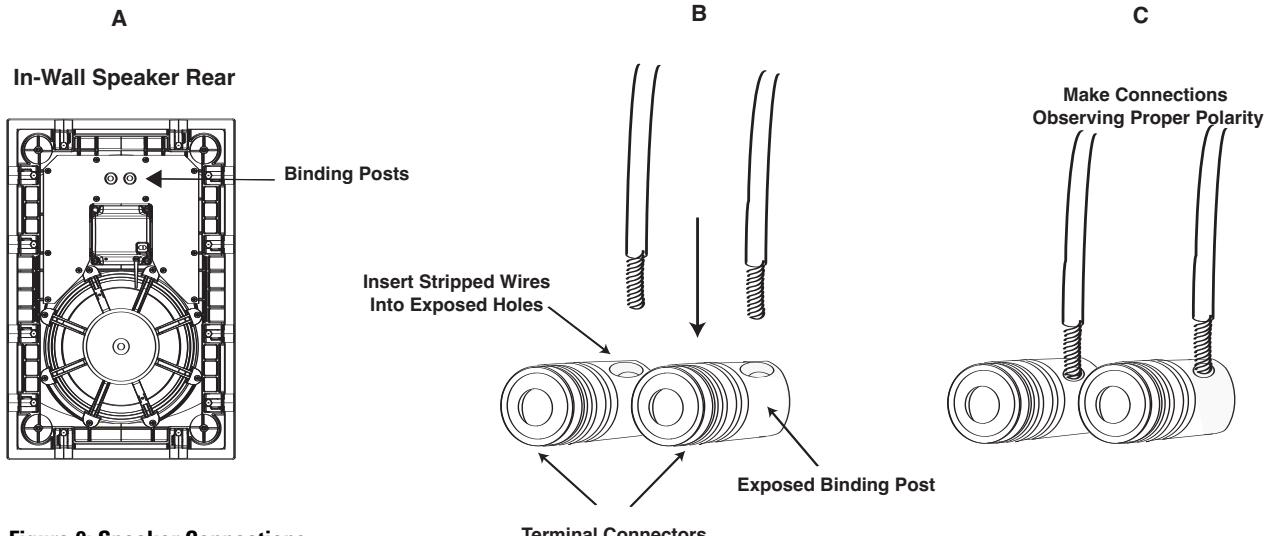
12. Route wires to the top of the speaker frame to prepare for hookup.

**In-Wall Speaker Frame**

**Route Wires to the Top of the Speaker System**

**Avoid Contact Between the Wires and Speaker Cone**

**Figure 8: Route Wires to Top of the Loudspeaker**



**Figure 9: Speaker Connections**

13. Locate the loudspeaker's binding posts, as shown in illustration A of Figure 9. From the top of the speaker, run the wires down to the loudspeaker's binding posts, as shown in illustrations B and C.
14. Loosen the terminal connectors by hand (counterclockwise) on the binding posts until the holes in their threaded posts are visible. Insert the wires from the top, as shown in illustration B in Figure 9.
- NOTE**  
Make all connections observing the proper polarity, positive to positive (+) and negative to negative (-).
15. Retighten the terminal connectors by hand to ensure a secure connection.
16. Refer to the JBL P81/P941 In-Wall Loudspeaker owner's manual for complete instructions on installing the speaker baffle to complete the installation.

### **P81BB/P941BB BACK BOX OUTER DIMENSIONS**

<b>Width</b>	17-1/2 inches (445mm)
<b>Height</b>	28-5/8 inches (727mm)
<b>Depth</b>	3-3/8 inches (86mm)

### **OBTAINING SERVICE**

Before returning a product for warranty or nonwarranty service, contact JBL Customer Support to determine the extent of the problem and to obtain a Return Authorization (RA) number. No products will be accepted without an RA number issued from JBL.

If a JBL product must be returned for repair, JBL will assume no responsibility for the product during shipping from the customer to JBL, whether the product is or is not covered under warranty.

#### **ALL RETURNS MUST BE:**

- well-packaged using the original packing materials (if possible)
- properly insured and consigned
- prepaid to a reliable shipping agent

The following information must be included when a product is returned for service:

- Name
- Company name
- Street address, city, state and zip code
- Telephone number, including area code and country code (if applicable)
- Product serial number
- A detailed description of the problem
- The preferred method of return shipment
- RA number clearly marked on both the inside and outside of the package

#### **To Contact JBL Customer Support:**

Call 516.255.4JBL or visit [www.jbl.com](http://www.jbl.com).

The JBL logo consists of the letters 'JBL' in a bold, sans-serif font. The 'J' is stylized with a small circle at the top. The 'B' and 'L' are in a standard bold font.<sup>®</sup>

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[www.jbl.com](http://www.jbl.com)

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